



Probabilistic Hydrologic Outlook Issued 2/16/2012

...Spring flood and water resources outlook number 1...

This flood outlook is for the National Weather Service (NWS) Omaha area. This area includes eastern Nebraska and portions of southwest Iowa. It includes portions of the following rivers and their tributaries:

Missouri...Niobrara...Big Blue...Elkhorn and Platte rivers

...Current flood outlook highlights...

- * **The risk of flooding from late winter into spring is presently near to below normal at most locations.**
- * **Current conditions are not conducive to major...large-scale flooding.**
- * **Based on current conditions...only minor flooding is expected along portions of the Missouri river. Minor flooding is defined as flooding that creates minimal or no property damage, but possibly some public threat.**
- * **The National Weather Service in Omaha will issue its next updated outlook on Thursday...March 1 2012.**
- * **Graphics for select river gauges are available on our website at: <http://water.weather.gov/ahps2/index.php?who=oax>, once a gauge is selected choose "chance of exceeding levels during entire period."**

Overview...the winter of 2011-2012 thus far this has been anything but normal. Across eastern Nebraska and southwest Iowa temperatures have been above normal and precipitation has been below normal. The result is the chance for spring flooding is generally near to below normal...though there are some exceptions to this. In the sections to follow the flood threat compared to normal is shown for each river basin.

Snow cover and liquid water content...as of today the observed snow cover across the area is minimal. The only appreciable snow cover is across central and eastern Nebraska and into portions of southwest Iowa. Snow depths range from 2 to 6 inches...resulting in snow water equivalent values of at most one inch in a swath from Kearney to Omaha and over to Atlantic, IA.

Soil conditions and frost depths...across southwest Iowa and far southeastern Nebraska soil saturations are above normal while elsewhere soil saturation is near normal. Frost depths range from 5 to 8 inches.

River conditions...the latest gauge readings indicate the Missouri and Platte Rivers are above normal...elsewhere rivers are at normal



flows for this time of year.

Weather outlook...the National Weather Service's Climate Prediction Center (CPC) indicates a slightly higher than usual chance for temperatures to be in the warmest third for March through May, compared to the 1981-2010 period. CPC also indicates equal chances for above, near and below normal precipitation, with increased chances for dry conditions further west in western Nebraska and Kansas, and increased chances for wetter conditions well to the east in the great lakes region. The CPC drought outlook indicates That moderate to severe drought in northwest and west central Iowa and far northeast Nebraska will persist this spring.

The following sections are the chances for minor flooding as compared to normal. In most cases the normal chance of flooding is low to begin with.

For questions regarding the information in this document please contact:

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* MISSOURI RIVER FROM DECATUR TO RULO *

Overview...through February 16 mountain snowpack across the headwaters of the Missouri river is at 84 percent of normal. It is worth noting that we are only half way through the accumulating period for the mountain snow pack. From a flooding perspective being below normal at this point in the season is certainly a positive. The plains snowpack is virtually non-existent this year. areas of central and eastern Nebraska have snow but the liquid equivalent contained in that snow is minor and most of it will likely melt over the next week. Though the mountain snowpack as substantial last year...the bigger difference is the lack of plains snow cover. Based on these conditions minor flooding is expected to occur from Plattsmouth to Rulo.



* NIOBRARA RIVER *

	CHANCE OF REACHING FLOOD STAGE COMPARED TO NORMAL	CHANCE OF MINOR FLOODING

NIOBRARA RIVER:		
AT VERDEL	N/A	<1%
PONCA CREEK:		
AT VERDEL	NEAR NORMAL	9%

* BIG BLUE RIVER BASIN *

	CHANCE OF REACHING FLOOD STAGE COMPARED TO NORMAL	CHANCE OF MINOR FLOODING

BIG BLUE RIVER:		
AT SURPRISE	NEAR NORMAL	5%
AT SEWARD	NEAR NORMAL	13%
AT CRETE	11% GREATER	55%
AT BEATRICE	-6% LESS	23%
AT BARNESTON	NEAR NORMAL	8%
LINCOLN CREEK:		
AT SEWARD	NEAR NORMAL	26%
W FK BIG BLUE RIVER:		
AT DORCHESTER	NEAR NORMAL	24%
TURKEY CREEK:		
AT WILBER	NEAR NORMAL	42%
LITTLE BLUE RIVER:		
AT DEWEESE	14% GREATER	24%
AT FAIRBURY	NEAR NORMAL	5%



* ELKHORN RIVER BASIN *

	CHANCE OF REACHING FLOOD STAGE COMPARED TO NORMAL	CHANCE OF MINOR FLOODING

ELKHORN RIVER:		
AT NELIGH	N/A	<1%
AT NORFOLK	N/A	<1%
AT PILGER	NEAR NORMAL	4%
AT WEST POINT	NEAR NORMAL	4%
AT HOOPER	NEAR NORMAL	3%
AT WATERLOO	N/A	<1%
N FK ELKHORN RIVER:		
AT PIERCE	NEAR NORMAL	7%
LOGAN CREEK:		
AT UEHLING	N/A	<1%

* PLATTE RIVER BASIN *

	CHANCE OF REACHING FLOOD STAGE COMPARED TO NORMAL	CHANCE OF MINOR FLOODING

PLATTE RIVER:		
AT DUNCAN	NEAR NORMAL	6%
AT NORTH BEND	-9% LESS	9%
AT LESHARA	-6% LESS	5%
AT ASHLAND	-9% LESS	12%
AT LOUISVILLE	NEAR NORMAL	9%
SHELL CREEK:		
AT COLUMBUS	8% GREATER	13%
SALT CREEK:		
AT ROCA	NEAR NORMAL	8%
AT LINCOLN	NEAR NORMAL	8%
AT GREENWOOD	7% GREATER	20%
AT ASHLAND	NEAR NORMAL	33%
WAHOO CREEK:		
AT ITHACA	NEAR NORMAL	34%



 * OTHER TRIBUTARIES TO THE MISSOURI RIVER *

	CHANCE OF REACHING FLOOD STAGE COMPARED TO NORMAL	CHANCE OF MINOR FLOODING
MAPLE RIVER AT MAPLETON	N/A	<1%
LITTLE SIOUX RIVER AT TURIN	-13% LESS	11%
SOLDIER RIVER AT PISGAH	N/A	<1%
BOYER RIVER AT LOGAN	NEAR NORMAL	8%
WEeping WATER CREEK AT UNION	NEAR NORMAL	9%
NISHNABOTNA RIVER:		
EAST NISHNABOTNA AT RED OAK	-7% LESS	21%
WEST NISHNABOTNA AT HANCOCK	-9% LESS	17%
WEST NISHNABOTNA AT RANDOLPH	-6% LESS	14%
NISHNABOTNA AT HAMBURG	-11% LESS	41%
LITTLE NEMAHA RIVER AT AUBURN	N/A	13%
N FK BIG NEMAHA RIVER AT HUMBOLDT	N/A	<1%
BIG NEMAHA RIVER AT FALLS CITY	NEAR NORMAL	9%
NODAWAY RIVER AT CLARINDA	NEAR NORMAL	18%

The rest of this document is a more specific listing of probabilities for each site.

The values in the table below are valid from 02/18/12 to 05/18/12.

In the table below...the 90 through 10 percent columns indicate the chance that a location on a river could rise above the listed stage levels in the next 90 days. For example: the maple river near Mapleton has a flood stage of 21 feet. There is a 20 percent chance that the river will rise above 9.1 feet in the next 90 days.

LOCATION	FS (FT)	ALL STAGES IN FEET								
		90%	80%	70%	60%	50%	40%	30%	20%	10%
MAPLE RIVER										
MAPLETON	21.0	5.5	5.9	6.2	6.8	7.3	7.6	8.1	9.1	11.7
LITTLE SIOUX RIVER										
TURIN	20.0	8.0	8.7	9.3	10.2	11.1	12.3	14.0	15.4	20.9
SOLDIER RIVER										
PISGAH	28.0	4.3	5.0	5.3	5.7	6.2	6.7	8.0	8.5	10.0
BOYER RIVER										
LOGAN	19.0	5.9	6.6	6.8	7.5	8.2	9.0	9.9	11.5	16.0
WEeping WATER CREEK										
UNION	25.0	6.3	7.3	7.9	8.7	10.5	13.8	16.1	18.6	24.6



EAST NISHNABOTNA RIVER										
RED OAK	18.0	7.7	8.8	10.5	11.7	12.8	14.8	16.4	18.2	20.8
WEST NISHNABOTNA RIVER										
HANCOCK	14.0	5.5	6.0	7.3	7.9	8.3	9.1	9.6	11.9	19.0
RANDOLPH	19.0	10.0	11.0	12.2	13.0	13.6	14.4	15.3	16.3	20.9
NISHNABOTNA RIVER										
HAMBURG	23.0	12.1	14.0	16.3	18.1	20.4	23.6	26.1	27.0	28.2
LOCATION	FS (FT)	90%	80%	70%	60%	50%	40%	30%	20%	10%
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LITTLE NEMAHA RIVER										
AUBURN	22.0	5.7	6.9	7.3	8.3	9.2	11.0	17.8	20.9	22.9
NORTH FORK BIG NEMAHA RIVER										
HUMBOLDT	28.0	5.4	6.8	7.1	7.8	8.9	10.3	12.1	13.1	15.2
BIG NEMAHA RIVER										
FALLS CITY	23.0	8.9	10.2	11.0	13.2	14.3	15.7	17.5	20.1	22.5
NODAWAY RIVER										
CLARINDA	19.0	12.7	13.4	13.9	14.2	14.5	15.4	16.9	18.2	20.9
BIG BLUE RIVER										
SURPRISE	7.0	2.0	2.8	3.0	3.3	3.4	3.7	4.1	4.8	5.9
SEWARD	18.0	5.1	6.6	8.9	10.1	11.4	12.0	13.9	16.2	18.7
CRETE	18.0	13.0	14.8	15.7	16.9	18.9	20.4	21.8	22.7	23.5
BEATRICE	16.0	6.2	7.6	9.0	9.6	11.8	13.1	14.6	16.3	18.4
BARNESTON	20.0	7.2	8.2	10.1	10.7	13.1	14.8	16.0	17.2	19.0
LINCOLN CREEK										
SEWARD	15.0	7.9	9.5	10.7	11.7	13.2	13.7	14.6	15.3	15.7
WEST FORK BIG BLUE RIVER										
DORCHESTER	15.0	7.3	7.9	8.6	10.4	11.3	12.6	14.2	15.2	15.8
TURKEY CREEK										
WILBER	11.0	6.6	7.7	8.5	9.3	10.5	11.0	11.9	12.9	14.0
LITTLE BLUE RIVER										
FAIRBURY	18.5	11.2	11.6	12.5	13.1	14.5	15.3	16.2	16.6	17.2
LOCATION	FS (FT)	90%	80%	70%	60%	50%	40%	30%	20%	10%
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NORTH FORK ELKHORN RIVER										
PIERCE	12.0	3.7	4.0	4.9	5.5	6.4	7.0	7.8	9.0	11.4
ELKHORN RIVER										
NELIGH	11.0	3.9	4.3	4.7	5.2	5.5	6.0	6.3	6.7	7.4
NORFOLK	12.0	3.2	3.5	3.9	4.1	4.4	4.6	5.1	5.2	5.9
PILGER	12.0	8.3	8.5	8.6	8.9	9.0	9.1	9.3	9.5	10.1
WEST POINT	12.0	7.3	7.7	7.8	8.1	8.2	8.4	8.6	9.2	10.5
HOOPER	14.0	5.7	6.1	6.6	7.1	7.7	8.4	8.8	11.0	12.2
WATERLOO	17.0	5.4	5.7	6.2	6.8	7.1	7.9	9.0	11.3	13.4



PLATTE RIVER										
DUNCAN	8.0	4.5	4.5	4.7	4.8	5.1	5.5	5.8	6.1	6.7
NORTH BEND	8.0	5.0	5.2	5.6	5.9	6.1	6.3	6.7	7.3	8.0
LESHARA	8.0	5.1	5.2	5.6	5.9	6.0	6.3	6.6	6.9	7.6
ASHLAND	20.0	16.6	16.9	17.3	17.7	17.9	18.4	18.9	19.5	20.1
LOUISVILLE	9.0	4.7	5.2	5.9	6.1	6.7	7.0	7.3	7.9	8.9
LOGAN CREEK										
UEHLING	18.0	5.3	6.0	6.7	7.7	8.2	9.1	10.8	12.0	14.2
NIOBRARA RIVER										
VERDEL	7.0	2.7	2.8	2.9	3.1	3.2	3.4	3.5	3.8	4.3
PONCA CREEK										
VERDEL	12.0	4.4	4.7	5.5	6.1	6.7	7.2	7.5	9.9	11.8
SHELL CREEK										
COLUMBUS	20.0	4.9	7.5	9.0	11.0	12.4	14.5	15.9	17.6	20.2
SALT CREEK										
ROCA	19.0	5.1	5.9	6.5	7.1	7.9	10.1	12.5	15.2	17.9
LINCOLN	20.5	4.9	5.5	6.3	7.1	9.5	11.3	13.7	15.3	18.6
GREENWOOD	20.0	6.2	7.1	8.2	10.0	11.9	14.4	16.1	19.9	22.2
ASHLAND	16.0	9.3	9.7	10.7	11.8	13.3	14.8	16.5	17.7	18.2
WAHOO CREEK										
ITHACA	19.0	6.7	8.5	9.3	11.0	12.3	16.6	19.4	21.1	21.9

Visit our web site at www.weather.gov/omaha for more weather and river information including graphs of probabilistic river outlooks.

For a map of the Missouri Basin flood potential, go here:

http://www.crh.noaa.gov/mbrfc/?n=snowmelt_2012